

SUPPLEMENTAL AGENDA PURCELLVILLE TOWN COUNCIL REGULAR MEETING JANUARY 10, 2017, 7:00 PM TOWN HALL COUNCIL CHAMBERS

1. PUBLIC HEARINGS

- **7.a. RZ16-01 Remapping the Floodplain (Overlay) District** (D. Galindo) (pgs. 3-34)
- **7.b.** OA16-03 Zoning Ordinance Text Amendment to Revise the Floodplain (Overlay) District (D. Galindo) (pgs. 3-34)

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STAFF REPORT PUBLIC HEARING ITEMS

Items # 7a-b

SUBJECT: RZ16-01 – Remapping the Floodplain (Overlay) District &

OA16-03 – Zoning Ordinance Text Amendment to Revise the

Floodplain (Overlay) District

DATE OF MEETING: January 10, 2017

STAFF CONTACT: Daniel Galindo, AICP – Senior Planner

SUMMARY and RECOMMENDATIONS:

Prior to February 17, 2017, the Town of Purcellville must adopt a new Flood Insurance Rate Map and revise its floodplain regulations to comply with the current standards of the National Flood Insurance Program (NFIP). Failure to do so would result in the Town's removal from the NFIP. The Town's participation in the NFIP allows the Town to be eligible for certain federal funds in the event our infrastructure is damaged during a flood and also ensures that flood insurance is available for purchase by property owners within the Town.

At its December 13th meeting, Town Council approved Resolution 16-12-04 initiating a remapping of the Town's Floodplain District (coded as RZ16-01) and related amendments to the text of the Zoning Ordinance (coded as OA16-03). At that same meeting, Council also authorized Town Staff to schedule the Planning Commission's public hearings on OA16-03 and RZ16-01 for January 5th and Town Council's public hearings for January 10th. As recommended by Staff, the Planning Commission voted to recommend approval of OA16-03 and RZ16-01 at its January 5th regular meeting with the following suggested modifications:

- 1. Delete "For other than new construction and substantial improvement, under the Coastal Barriers Resource Act (P.L. 97-348)," from the beginning of the proposed definition of "Start of construction" in Article 12, Section 7;
- 2. Change "Purcellville town offices" to "Town of Purcellville offices" in Article 12, Section 9;
- 3. Capitalize "Town Council" in Article 12, Section 10;
- 4. Replace "BFE" with "base flood elevation" in the text proposed for Article 12, Section 12, Subsection 12.6, Number 2;

- 5. Delete "zones" as the second word of the paragraph in the text proposed for Article 12, Section 12, Subsection 12.6, Number 3; and
- 6. In Article 12, Section 18, Subsection 18.2, delete the proposed Number 6 and renumber the remaining numbers of the subsection as 6 through 17.

BACKGROUND:

Areas prone to flooding, known as floodplains, exist within Purcellville. In these floodplains, there is a pronounced threat of recurring flooding which may result in damage to real property or endanger the health and safety of the public. According to the Federal Emergency Management Agency (FEMA), floods are the most common, and most costly, natural disaster. Because of this, the National Flood Insurance Act of 1968 authorized federally-backed flood insurance to be made available through the National Flood Insurance Program (NFIP). The NFIP aims to reduce the impact of flooding on private and public structures by providing affordable insurance to property owners and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures which also results in greater protection of the health and safety of the public.

Although FEMA first formally identified Purcellville's floodplains on a Flood Hazard Boundary Map in 1975, Purcellville did not join the NFIP until a more detailed Flood Insurance Rate Map (FIRM) was created in 1989. The Town's participation in the NFIP allows the Town to be eligible for certain federal funds in the event our infrastructure is damaged during a flood and also ensures that flood insurance is available for purchase by property owners within the Town. After joining the NFIP, communities periodically adopt new FIRMs and amend their floodplain management regulations to maintain compliance with the standards of the NFIP. It is now time for Purcellville to do so, and as recommended by Staff, Town Council approved Resolution 16-12-04 on December 13th which initiated a zoning text amendment to revise the Town of Purcellville's floodplain management regulations (coded as OA16-03) and the remapping of the boundaries of the Town's Floodplain District (coded as RZ16-01).

ANALYSIS:

Since early 2014, FEMA has worked with Loudoun County and its towns to update and improve the accuracy of the county-wide FIRM and associated Flood Insurance Study (FIS). Recently, FEMA notified the Town that the new FIRM and new FIS have been finalized and will become effective on February 17, 2017. Before then, the Town must accomplish certain

tasks in order to remain in the NFIP. The purpose of OA16-03 and RZ16-01 is to accomplish these tasks, which include:

- 1. Amending the Town's floodplain management regulations contained within the Zoning Ordinance to satisfy the current standards of the NFIP; and
- 2. Remapping the boundaries of the Floodplain District on the Town's Official Zoning Map to conform to the revised FIRM and FIS boundaries.

Staff began preparing the revised floodplain regulations that would become OA16-03 in the summer of 2016, and a draft was sent to the Virginia Department of Conservation and Recreation (DCR), which administers the NFIP in the Commonwealth, in early November to be reviewed for compliance with NFIP standards. In early December, DCR returned comments suggesting a few minor changes to the draft ordinance to ensure its compliance with these standards. Staff has since revised the draft floodplain regulations to incorporate DCR's suggestions, and DCR has determined that the proposed amendment now complies with the requirements of the NFIP.

OA16-03 proposes to revise the Town's floodplain management regulations by amending: (1) Article 5, Section 5; (2) Article 12, Sections 1-4 and 6-19; and (3) Article 15, Section 2 of the Purcellville Zoning Ordinance. Attachment 1 summarizes the amendments proposed by OA16-03. A redline copy of the entire amendment has been provided as Attachment 2; however, Staff and the Planning Commission are recommending the following changes to the amendment prior to its adoption:

- 1. Delete "For other than new construction and substantial improvement, under the Coastal Barriers Resource Act (P.L. 97-348)," from the beginning of the proposed definition of "Start of construction" in Article 12, Section 7;
- 2. Change "Purcellville town offices" to "Town of Purcellville offices" in Article 12, Section 9;
- 3. Capitalize "Town Council" in Article 12, Section 10;
- 4. Replace "BFE" with "base flood elevation" in the text proposed for Article 12, Section 12, Subsection 12.6, Number 2;
- 5. Delete "zones" as the second word of the paragraph in the text proposed for Article 12, Section 12, Subsection 12.6, Number 3; and
- 6. In Article 12, Section 18, Subsection 18.2, delete the proposed Number 6 and renumber the remaining numbers of the subsection as 6 through 17.

In conjunction with OA16-03's proposed adoption of the new FIRM and new FIS as the basis of the Floodplain District (see Article 12, Section 8 of Attachment 2), RZ16-01 would remap the District on Purcellville's Official Zoning Map to conform to the updated FIRM and FIS for

Loudoun County, Virginia and Incorporated Areas (including Purcellville). Attachment 3 is a map that displays the current boundaries of the Floodplain District and the proposed boundaries of the Floodplain Overlay District¹.

ISSUES:

At its December 13th meeting, Town Council also authorized Staff to schedule the Planning Commission's public hearings on OA16-03 and RZ16-01 for January 5th and Town Council's public hearings for January 10th. In order to adopt these amendments and provide adequate time for FEMA to review the Town's revised regulations for compliance with the NFIP prior to February 17th, the public hearing and adoption processes for both the Commission and Council will run in parallel in January on the following timelines:

	Planning Commission	Town Council
Public Hearing Date:	January 5	January 10
Target Date for Vote:	January 19*	January 24

* The Planning Commission instead approved a motion to add these items for action at its January 5th meeting and approved a motion recommending approval with modifications at the same meeting.

BUDGET IMPACT:

There is no significant budgetary impact to approve OA16-03 and RZ16-01; however, if these new regulations are not adopted and the Town is removed from the NFIP, there could be significant budget impacts in the event of a flood that damages Town infrastructure as we would no longer be eligible for certain federal disaster relief funds.

FINDINGS:

1. Areas of floodplain exist within Purcellville where there is a threat of recurring flooding which may result in damage to real property or endanger the health and safety of the public.

¹ OA16-03 proposes to rename the current "Floodplain District" to "Floodplain Overlay District" to better reflect that the District's regulations apply *in addition to* the regulations of the underlying zoning district (such as, for example, R-2 Single-Family Residential, CM-1 Local Service Industrial, etc.). The Floodplain District's regulations also apply only to the portion of land within the District's boundaries and, thus, may apply to only a portion of a given property.

- 2. There is a desire and need to mitigate these threats through the regulation of development in the floodplain and by ensuring the availability of a program of insurance coverage for those who reside or hold title to property located within such flood-prone areas.
- 3. Adopting the up-to-date floodplain boundaries displayed in the new FIRM and FIS for Loudoun County, Virginia and Incorporated Areas will serve the public necessity, convenience, and general welfare.
- 4. Adopting amended floodplain management regulations which comply with the current standards of the NFIP will serve the public necessity, convenience, and general welfare.
- 5. Failure to adopt the new FIRM, adopt the new FIS, and amend the Town's floodplain regulations by February 17, 2017 will result in the Town's removal from the NFIP.

ATTACHMENTS:

- 1. OA16-03 Summary of Proposed Zoning Ordinance Amendments
- 2. OA16-03 Proposed Floodplain Regulations for Town Council Public Hearing
- 3. RZ16-01 Proposed Floodplain Overlay District Map

These materials and others pertaining to OA16-03 and RZ16-01 can be found at: http://purcellvilleva.gov/DocumentCenter/Index/283

PZO Article and	PZO Amendments and Changes	
Section Generally	1. Changes "floodplain district" to "floodplain overlay district" to match	
denerany	new terminology, where appropriate.	
	2. Minor corrections and changes to phrasings and terminology to	
	ensure accuracy, consistency and readability.	
	3. Adds, corrects, or otherwise modifies cross-references within the	
	ordinance, including, but not limited to, the instances listed below.	
Article 5	1. Changes "Floodplain District" to "Floodplain Overlay District" to	
(Nonconformities),	correspond to revised title of Article 12.	
Section 5		
Article 12	1. Changes article title to "Floodplain Overlay District."	
(Floodplain		
District)		
Article 12	1. Adds state code citation of authority for the district.	
(Floodplain District), Section 1		
Article 12	Clarifies that the district regulations apply to public and private	
(Floodplain	lands.	
District), Section 2	idilus.	
Article 12	1. Clarifies that regulations do not imply complete protection from	
(Floodplain	floods.	
District), Section 3		
Article 12	1. Adds regulations regarding penalties for violation of floodplain	
(Floodplain	regulations.	
District), Section 6		
Article 12	1. Clarifies the use of definitions within this article and the ordinance as	
(Floodplain	a whole.	
District), Section 7	2. Adds definitions for the following terms: Appurtenant or accessory	
	structure; Base flood elevation; Basement; Conditional Letter of Map	
	Revision (CLOMR) Elevated building; Encroachment; Existing	
	construction; Flood Insurance Rate Map (FIRM); Flood Insurance Study (FIS); Flood-proofing; Floodway; Freeboard; Highest adjacent	
	grade; Historic structure; Hydrologic and Hydraulic Engineering	
	Analysis; Letter of Map Amendment (LOMA); Letter of Map Change	
	(LOMC); Letter of Map Revision (LOMR); Lowest adjacent grade;	
	Lowest floor; Manufactured home; Manufactured home park or	
	subdivision; New construction; Post-FIRM structures; Pre-FIRM	
	structures; Recreational vehicle; Repetitive loss structure; Severe	
	repetitive loss structure; Shallow flooding area; Special flood hazard	
	area; State of construction; Structure; Substantial damage;	
	Substantial improvement; Violation; Watercourse.	
	3. Deletes definition for the following terms: Anticipated development.	
	4. Modifies definitions for the following terms: Base flood;	
A .1.1.40	Development; Flood or flooding; Floodplain; Flood-prone area.	
Article 12	1. Updates terminology and dates for basis of the district regulations.	
(Floodplain	2. Adds regulations allowing the Town to identify and regulate flood	
District), Section 8	areas not delineated on Flood Insurance Rate Maps.	

PZO Article and	PZO Amendments and Changes	
Section		
	 Clarifies what constitutes as approximated floodplain areas. Modifies language regarding the accepted technical methods for determining the one percent annual chance flood elevation when such information cannot be determined using other sources of data. Adds regulations allowing the Floodplain Administrator to require hydrologic and hydraulic analysis for any development and requiring the lowest floor to be elevated at least 18 inches above the base flood level determined by such analysis. Adds regulations stating the information that the Floodplain Administrator shall obtain during the permitting process. Clarifies what constitutes as detailed floodplain areas. 	
	8. Clarifies what constitutes as the floodway.	
Article 12	1. Clarifies that a completed Letter of Map Revision is a record of the	
(Floodplain	Federal Emergency Management Agency's approval of a district	
District), Section 10	boundary change.	
Article 12 (Floodplain	 Adds titles to four existing subsections. Clarifies that placement of manufactured homes require a zoning 	
District), Section 12	permit.	
Districty, Section 12	3. Adds that the Zoning Administrator shall review all sites to assure	
	they are reasonably safe from flooding.	
	4. Adds regulations for when hydrologic and hydraulic analysis is required and the required qualifications for those that perform such analysis.	
	5. Updates the list of agencies that must permit or be notified of the alteration or relocation of a watercourse.	
	 6. Adds that topographic information showing existing and proposed ground elevations must be incorporated for development applications and zoning permits in the floodplain district. 	
	7. Adds general standards applying to all permits.	
	8. Adds elevation and construction standards for residential	
	construction, non-residential construction, space below the lowest	
	floor, manufactured homes, and recreational vehicles.	
Article 12	1. Deletes entire section listing permitted uses.	
(Floodplain		
District), Section 13		
Article 12	1. Deletes entire section listing uses permitted with a variance.	
(Floodplain		
District), Section 14 Article 12	Adds general standards for the issuing of variances.	
(Floodplain	 Adds general standards for the issuing of variances. Adds the historic nature of a structure as a factor to be considered 	
District), Section 15	when issuing a variance.	
Article 12	Adds regulations that existing structures in the floodway shall only be	
(Floodplain	enlarged when such expansion would not result in any increase in the	
District), Section 17	base flood elevation.	

PZO Article and	PZO Amendments and Changes	
Section		
Article 12	1. Adds a new Section 18 titled "Administration."	
(Floodplain	2. Adds regulations designating the Zoning Administrator as the	
District), Section 18	Floodplain Administrator and stating the duties and responsibilities	
	of the position.	
	3. Adds regulations regarding the use and interpretation of Flood Insurance Rate Maps.	
	4. Adds regulations regarding the regulation of floodplains when the jurisdictional boundary changes.	
	5. Adds regulations regarding Letters of Map Revision.	
	6. Adds regulations regarding the submission of technical data to the	
	Federal Emergency Management Agency by the Town.	
Article 12	1. Adds a new Section 19 titled "Standards for Subdivision Proposals"	
(Floodplain	containing such standards.	
District), Section 19		
Article 15	1. Creates a new subsection titled "Terms Defined" consisting of the	
(Definitions),	existing list of such terms.	
Section 2	2. Adds cross-reference to new list of alternative locations within the	
	Zoning Ordinance where terms are defined in Article 15, Section 2,	
	Subsection 2.2.	
	3. Modifies definitions of the following terms: Development; Floodplain	
	4. Adds a new subsection titled "Further Definitions" which lists the	
	alternative locations within the Zoning Ordinance where terms are	
	defined.	

The following Articles and Sections of the *Zoning Ordinance for the Town of Purcellville, Virginia* would be amended to add all underlined text and to remove all strikethrough text as follows:

ARTICLE 5. - NONCONFORMITIES

...

Section 5. - Destruction of nonconformities.

The owner of any residential or commercial building damaged or destroyed by a natural disaster or other act of God shall be permitted to repair, rebuild, or replace such building to eliminate or reduce the nonconforming features to the extent possible, without the need to obtain a variance as provided in § 15.2-2310 of the Code of Virginia, 1950, as amended. If such building is damaged greater than 50 percent and cannot be repaired, rebuilt or replaced except to restore it to its original nonconforming condition, the owner shall have the right to do so. The owner shall apply for a zoning permit for such restoration. Any work done to repair, rebuild or replace such building shall be in compliance with the provisions of the Uniform Statewide Building Code, and any work done to repair, rebuild or replace such building shall be in compliance with the provisions of *Article* 12: Floodplain Overlay Districtarticle 12. Floodplain district, if applicable. Unless such building is repaired, rebuilt or replaced within two years of the date of the natural disaster or other act of God, such building shall only be repaired, rebuilt or replaced in accordance with the provisions of this ordinance. However, if the nonconforming building is in an area under a federal disaster declaration and the building has been damaged or destroyed as a direct result of conditions that gave rise to the declaration, then the property owner shall have an additional two years for the building to be repaired, rebuilt or replaced as otherwise provided in this paragraph. For purposes of this section, "act of God" shall include any natural disaster or phenomena including a hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, earthquake or fire caused by lightning or wildfire. For purposes of this section, owners of property damaged by an accidental fire have the same rights to rebuild such property as if it were damaged by an act of God. Nothing herein shall be construed to enable the property owner to commit an arson as defined under § 18.2-77 or 18.2-80 of the Code of Virginia, 1950, as amended, and obtain vested rights under this section.

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ARTICLE 12. - FLOODPLAIN OVERLAY DISTRICT

Section 1. - Purpose of article.

This ordinance is adopted pursuant to the authority granted to localities by Va. Code § 15.2 - 2280.

The purpose of these provisions is to prevent: the loss of life and property, the creation of health and safety hazards, the disruptions of commerce and governmental services, the

extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

- a. Regulating the uses, activities and development which, acting alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities and frequencies.
- b. Restricting or prohibiting certain uses, activities and development from locating within areas subject to flooding.
- c. Requiring all those uses, activities and development that do occur in flood-prone areas to be protected and/or flood-proofed against flooding and flood damage.
- d. Protecting individuals from buying land and structures which are unsuited for intended purposes because of flood hazards.
- e. Assuring compliance with federal and state laws and regulations that address the need for floodplain management and protection.
- f. Qualifying residents and property owners in the Town of Purcellville for the insurance and subsidies provided by the National Flood Insurance Program.

Section 2. - Applicability.

These provisions shall apply to all <u>privately and publicly owned</u> lands within the Town of Purcellville and identified as <u>being in the 100-year floodplain by the Federal Insurance Administration</u> Special Flood Hazard Area (SFHA) according to the Flood Insurance Rate Map (FIRM) that is provided to Loudoun County and the Town of Purcellville by the Federal Emergency Management Agency (FEMA).

Section 3. - Compliance and liability.

- <u>3.11.</u> No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged, or structurally altered except in full compliance with the terms and provisions of this ordinance and any other applicable ordinances and regulations which apply to uses within the jurisdiction of this ordinance.
- 3.22. The degree of flood protection sought by the provisions of this ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study but does not imply total flood protection. Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This ordinance does not imply that areas outside the floodplain overlay districts, or that land uses permitted within such districts will be free from flooding or flood damage.
- 3.33. This ordinance shall not create liability on the part of the Town of Purcellville or any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

Section 4. - Abrogation and greater restrictions.

This ordinance supersedes any ordinance currently in effect in flood_prone areas. However, any underlying ordinance shall remain in full force and effect to the extent that those provisions are more restrictive.

Section 5. - Severability.

If any section, subsection, paragraph, sentence, clause, or phrase of this ordinance shall be declared invalid for any reason whatever, such decision shall not affect the remaining portions of this ordinance. The remaining portions shall remain in full force and effect; and for this purpose, the provisions of this ordinance are hereby declared to be severable.

Section 6. - Penalties.

Any person who fails to comply with any of the requirements or provisions of this article or directions of the Floodplain Administrator or any authorized employee of the Town of Purcellville shall be guilty of the appropriate violation and subject to the penalties therefore.

The Virginia Uniform Statewide Building Code addresses building code violations and the associated penalties in Section 104 and Section 115. Violations and associated penalties of the Zoning Ordinance of the Town of Purcellville are addressed in *Article 11, Section 17: Violation and Penalties*.

In addition to the above penalties, all other actions are hereby reserved, including an action in equity for the proper enforcement of this article. The imposition of a fine or penalty for any violation of, or noncompliance with, this article shall not excuse the violation or noncompliance or permit it to continue; and all such persons shall be required to correct or remedy such violations within a reasonable time. Any structure constructed, reconstructed, enlarged, altered or relocated in noncompliance with this article may be declared by the Town of Purcellville to be a public nuisance and abatable as such. Flood insurance may be withheld from structures constructed in violation of this article. In addition to all other penalties provided by law, flood insurance may be withheld from structures constructed in violation of this ordinance.

Section 7. - Definitions.

The definitions of this section shall be used solely for the purpose of interpreting and administering the regulations of this article. If the definitions of this section conflict with other definitions of this Zoning Ordinance, the definitions of this section shall control. Unless specifically defined in this section or in *Article 15: Definitions*, words or phrases used in this article shall be interpreted as to give them the meaning they have in common usage and to give this article its most reasonable application given its stated purpose.

7.1 Anticipated development. That development which could occur given the existing zoning and regulations on property located within the floodplain/floodway.

Appurtenant or accessory structure. Accessory structures not to exceed 200 sq. ft.

Base flood. The flood having a one percent (1%) chance of being equaled or exceeded in any given year. Also referred to as the 100-year flood.

<u>Base flood elevation</u>. The water surface elevation of the Base Flood in relation to the datum specified on the Flood Insurance Rate Map.

Basement. Any area of the building having its floor sub-grade (below ground level) on all sides.

Board of Zoning Appeals. The board appointed to review appeals made by individuals with regard to decisions of the Zoning Administrator in the interpretation of this ordinance.

<u>Conditional Letter of Map Revision (CLOMR)</u>. A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements

for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study.

7.2 — Development. _Any man_made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, the placement of manufactured homes, streets, and other paving, utilities, filling, grading, excavation, mining, dredging, or drilling operations, or storage of equipment or materials.

<u>Elevated building</u>. A non-basement building built to have the lowest floor elevated above the ground level by means of solid foundation perimeter walls, pilings, or columns (posts and piers).

<u>Encroachment</u>. The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

<u>Existing construction</u>. Structures for which the "start of construction" commenced before July 5, 2001. "Existing construction" may also be referred to as "existing structures."

7.3 Flood or flooding.

- 1. A general and temporary inundation of normally dry land area-from:
 - a. The overflow of inland or tidal waters:
 - b. The unusual and rapid accumulation or runoff of surface waters from any source; or
 - c. Mudflows which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- 2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph 1 (a) of this definition.

Flood Insurance Rate Map (FIRM). An official map of a community, on which the Federal Emergency Management Agency has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

<u>Flood Insurance Study (FIS)</u>. A report by FEMA that examines, evaluates and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudflow and/or flood-related erosion hazards.

- 7.4 Floodplain. Any land area susceptible to being inundated by water from any source. (a) A relatively flat or low land area adjacent to a river, stream, or watercourse which is subject to partial or complete inundation; (b) an area subject to the unusual and rapid accumulation or runoff of surface waters from any source.
- 7.5 Base flood/100-year flood. A flood, that on the average, is likely to occur once every 100 years (i.e., that has a one percent chance of occurring each year, although the flood may occur in any year).

- 7.6 Board of zoning appeals. The board appointed to review appeals made by individuals with regard to decisions of the zoning administrator in the interpretation of this ordinance.
- 7.7 Flood_prone area. See Floodplain. Any land area susceptible to being inundated by water from any source.

Flood-proofing. Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot .

Freeboard. A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization in the watershed.

Highest adjacent grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure. Any structure that is

- 1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- 2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- 3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or,
- 4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior; or,
 - b. Directly by the Secretary of the Interior in states without approved programs.

Hydrologic and Hydraulic Engineering Analysis. Analyses performed by a licensed professional engineer, in accordance with standard engineering practices that are accepted by the Virginia Department of Conservation and Recreation and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

Letter of Map Amendment (LOMA). An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a Land as defined by meets and bounds or structure is not located in a special flood hazard area.

<u>Letter of Map Change (LOMC)</u>. A Letter of Map Change is an official FEMA determination, by letter, that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. <u>Letters of Map Change include</u>:

Letter of Map Revision (LOMR). A revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. A Letter of Map Revision Based on Fill (LOMR-F), is a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

Lowest adjacent grade. The lowest natural elevation of the ground surface next to the walls of a structure.

Lowest floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of Federal Code 44CFR §60.3.

Manufactured home. A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days.

<u>Manufactured home park or subdivision</u>. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

New construction. For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after November 15, 1989 and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

<u>Post-FIRM structures.</u> A structure for which construction or substantial improvement occurred on or after November 15, 1989.

<u>Pre-FIRM structures</u>. A structure for which construction or substantial improvement occurred before November 15, 1989.

Recreational vehicle. A vehicle which is:

- 1. Built on a single chassis;
- 2. 400 square feet or less when measured at the largest horizontal projection:
- 3. Designed to be self-propelled or permanently towable by a light duty truck; and,
- 4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel, or seasonal use.

Repetitive loss structure. A building covered by a contract for flood insurance that has incurred flood-related damages on two occasions in a 10-year period, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

Severe repetitive loss structure. A structure that:

- 1. Is covered under a contract for flood insurance made available under the NFIP; and
- 2. Has incurred flood related damage for which:
 - a. 4 or more separate claims payments have been made under flood insurance coverage with the amount of each such claim exceeding \$5,000, and with the cumulative amount of such claims payments exceeding \$20,000; or
 - b. At least 2 separate claims payments have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.

Shallow flooding area. A special flood hazard area with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Special flood hazard area. The land in the floodplain subject to a one (1%) percent or greater chance of being flooded in any given year as determined in Section 8 of this article.

Start of construction. For other than new construction and substantial improvement, under the Coastal Barriers Resource Act (P.L. – 97-348), means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of the construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure. For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

<u>Substantial damage</u>. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

<u>Substantial improvement.</u> Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred repetitive loss or substantial damage regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or

- 2. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
- 3. Historic structures undergoing repair or rehabilitation that would constitute a substantial improvement as defined above, must comply with all ordinance requirements that do not preclude the structure's continued designation as a historic structure. Documentation that a specific ordinance requirement will cause removal of the structure from the National Register of Historic Places or the State Inventory of Historic places must be obtained from the Secretary of the Interior or the State Historic Preservation Officer. Any exemption from ordinance requirements will be the minimum necessary to preserve the historic character and design of the structure.

<u>Violation</u>. The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Watercourse. A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Section 8. - Establishment of floodplain overlay district.

The floodplain <u>overlay</u> district is hereby established as an overlay district, meaning that it is a district overlaid upon other districts as shown on the official zoning <u>ordinance</u> map, and as such, the provisions for the floodplain <u>overlay</u> district shall serve as a supplement to the underlying district provisions. In the event of any conflict between the provisions or requirements of the floodplain <u>overlay</u> district and those of any underlying district, the more restrictive provisions shall apply.

In the event any provision concerning the floodplain <u>overlay</u> district is declared inapplicable as a result of any legislative or administrative actions or judicial decision, the basic underlying provisions shall remain applicable.

Basis of district:

The floodplain overlay district shall include the Special Flood Hazard Areas (SFHAs) areas subject to inundation by waters of the 100 year flood. The basis for the delineation of the district shall be the Flood Insurance Study (FIS), and the Flood Insurance Rate Map (FIRM) for Loudoun County, Virginia and Incorporated Areas, prepared by the Federal Emergency Management Agency, dated February 17, 2017, as revised or amended 100 year flood elevations or profiles contained in the Flood Insurance Study for the Town of Purcellville prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated November 15, 1989, as amended.

The Town of Purcellville may identify and regulate local flood hazard or ponding areas that are not delineated on the FIRM. These areas may be delineated on a "Local Flood Hazard Map" using best available topographic data and locally derived information such as flood of record, historic high water marks or approximate study methodologies.

1. The approximated floodplain areas shall be the A Zones on the FIRM accompanying the FIS that floodplain area for which no detailed flood profiles or elevations are provided, but where a one percent annual chance 100-year floodplain boundary has been approximated.

Such areas are shown as Zone A on the maps accompanying the flood insurance study. For these areas, the <u>one percent annual chance</u> 100-year—flood elevations and floodway information from federal, state, and other acceptable sources shall be used, when available.

Where the specific one percent annual chance 100 year—flood elevation cannot be determined for this area using other sources of data, such as the U.S. Army Corps of Engineers Floodplain Information Reports, U.S. Geological Survey Flood Prone Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this elevation. _in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analysis shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. For development proposed in the approximate floodplain the applicant must use technical methods that correctly reflect currently accepted practices, such as point on boundary, high water marks, or detailed methodologies hydrologic and hydraulic analyses. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the town Floodplain Administrator.

The Floodplain Administrator reserves the right to require a hydrologic and hydraulic analysis for any development. When such base flood elevation data is utilized, the lowest floor shall be elevated to or above the base flood level plus eighteen (18) inches.

<u>During the permitting process, the Floodplain Administrator shall obtain:</u>

- a. The elevation of the lowest floor (in relation to mean sea level), including the basement, of all new and substantially improved structures; and,
- b. If the structure has been flood-proofed in accordance with the requirements of this article, the elevation (in relation to mean sea level) to which the structure has been flood-proofed.

For subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser, base flood elevation data shall be obtained from other sources or developed using detailed methodologies comparable to those contained in a FIS.

- 2. The detailed floodplain areas shall be the AE or AH Zones on the FIRM accompanying the FIS for which the base flood elevations have been provided and the floodway has not been delineated.
- 3. The floodway is in an AE Zone and is delineated, for purposes of this ordinance, using the criterion that certain areas within the floodplain must be capable of carrying the waters of the one percent annual chance flood without increasing the water surface elevation of that flood more than one (1) foot at any point. The areas included in the floodway are specifically defined in the above-referenced FIS and shown on the accompanying FIRM.

Section 9. - Official zoning map.

The boundaries of the floodplain <u>overlay</u> district are established as shown on the <u>Flood</u> <u>Insurance Rate Mapflood insurance rate map</u> which is declared to be a part of this ordinance and which shall be kept on file at the Purcellville town offices.

Section 10. - District boundary change.

The delineation of the floodplain <u>overlay</u> district may be revised by the town council where natural or manmade changes have occurred and/or where more detailed studies have been conducted or undertaken by the U.S. Army Corps of Engineers or other qualified agency or an individual documents the need for such change. However, prior to any such change, approval must be obtained from the Federal <u>Emergency Management Agency Insurance Administration</u>. A completed LOMR is a record of this approval.

Section 11. - Interpretation of district boundaries.

Initial interpretations of the boundaries of the floodplain <u>overlay</u> district shall be made by the zoning administrator. Should a dispute arise concerning the boundaries of the district the applicant may appeal the decision of the administrator to the board of zoning appeals. The person questioning or contesting the location of the district boundary shall be given a reasonable opportunity to present his case to the board and to submit his own technical evidence if he so desires.

Section 12. - General provisions.

12.1 Zoning Permit Required

All uses, activities and development, including placement of manufactured homes, occurring within the floodplain overlay district shall be undertaken only upon the issuance of a zoning permit. Such development shall be undertaken only in strict compliance with the provisions of this ordinance and with all other applicable codes and ordinances, such as the Virginia Uniform Statewide Building Code and the Town of Purcellville Land Development and Subdivision Control Ordinance. Prior to the issuance of any such permit, the zoning administrator shall require all applications (applicants) to comply with all applicable state and federal laws, and shall review all sites to assure they are reasonably safe from flooding. Under no circumstances shall any use, activity and/or development adversely affect the capacity of the channels or floodway of any watercourse, drainage ditch or any other drainage facility or system.

12.2 Effect of Development on Base Flood Elevation

No new construction or development shall be permitted within the (AE area) floodplain overlay district unless it is demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the elevation of the 100-year base flood more than one foot at any point. Within any floodway area, no new construction or development shall be permitted that would cause any increase in the 100-year base flood elevation. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

12.3 Alteration or Relocation of Waterways

Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within the Town of Purcellville this municipality, approval a permit shall be obtained from

the Division of Soil and Water Conservation (Department of Conservation and Historic Resources). A permit from the U.S. Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission, and certification from the state water control board may be necessary (a joint permit application is available from any one of these three organizations). Further notification of the proposal shall be given to all affected adjacent jurisdictions, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), other required agencies and themunicipalities. Copies of such notifications shall be provided to the Division of Soil and Water Conservation (Department of Conservation and Historic Resources), and the Federal Emergency Management Agency Insurance Administration.

12.4 <u>Information Required for Permits and Applications</u>

All applications for development in the floodplain <u>overlay</u> district and all zoning permits issued for the floodplain shall incorporate the following information:

- a. For structures that have been elevated, the elevation of the lowest floor (including basement).
- b. For structures that have been flood_proofed (nonresidential only), the elevation to which the structure has been flood_proofed.
- c. The elevation of the 100-year base flood.
- d. Topographic information showing existing and proposed ground elevations.

12.5 General Standards

The following provisions shall apply to all permits:

- 1. New construction and substantial improvements shall be according to Section 12.6 of this article and the Virginia Uniform Statewide Building Code, and anchored to prevent floatation, collapse or lateral movement of the structure.
- 2. Manufactured homes shall be anchored to prevent floatation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state anchoring requirements for resisting wind forces.
- 3. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- 4. New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- 5. Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- 6. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- 7. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

- 8. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- 9. The flood carrying capacity within an altered or relocated portion of any watercourse shall be maintained.

12.6 Elevation and Construction Standards

1. Residential Construction

New construction or substantial improvement of any residential structure (including manufactured homes) in Zones AE, AH and A with detailed base flood elevations shall have the lowest floor, including basement, elevated at least eighteen (18) inches above the base flood level. The placement of manufactured homes (mobile homes) is prohibited, except in an existing manufactured home (mobile home) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring, elevation, and encroachment standards are met.

2. Non-Residential Construction

New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated at least eighteen (18) inches above the base flood level. Non-residential buildings located in all AE, AH and A zones with detailed base flood elevations may be flood-proofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the BFE plus two feet are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification, including the specific elevation (in relation to mean sea level) to which such structures are flood-proofed, shall be maintained by the Floodplain Administrator.

3. Space Below the Lowest Floor

<u>In zones A, AE, and AH zones, fully enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation shall:</u>

- a. Not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator).
- b. Be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
- c. Include measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:
 - i. Provide a minimum of two openings on different sides of each enclosed area subject to flooding.

- ii. The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.
- iii. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.
- iv. The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade.
- v. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
- vi. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.

4. Standards for Manufactured Homes and Recreational Vehicles

- a. All manufactured homes placed, or substantially improved, on individual lots or parcels, must meet all the requirements for new construction, including the elevation and anchoring requirements in sections 12.5 and 12.6 (1) through (3).
- b. All recreational vehicles placed on sites must either:
 - i. Be on the site for fewer than 180 consecutive days, be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions); or
 - ii. Meet all the requirements for manufacture homes Section 12.6(4)(a).

Section 13. - ReservedPermitted uses.

The following uses are permitted in the floodplain overlay district provided that they are not prohibited by any other applicable ordinance:

- 1. Agricultural uses such as general farming, pasturing, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting.
- 2. Public and private recreational uses and activities such as parks, day camps, picnic grounds, golf courses, boat launching and swimming areas, hiking and horseback riding trails, wildlife and nature preserves, game farms, fishing areas.
- 3. Accessory residential uses such as gardens, play areas, and pervious loading areas.
- 4. Accessory industrial and commercial uses such as pervious parking and loading areas.
- 5. Temporary uses such as circuses, carnivals and similar activities.

Section 14. - Reserved Uses permitted with a variance.

The following uses are conditionally permitted in the floodplain district when a variance is granted by the board of zoning appeals provided that they are not prohibited by this or any other ordinance.

1. Structures accessory to uses and activities permitted in this section.

- 2. Utilities and public facilities and improvements such as streets, bridges, transmission lines, pipe lines and other similar uses.
- 3. Storage of materials and equipment provided that they are not buoyant, or provided that such material and equipment is firmly anchored to prevent flotation or movement, and/or can be readily removed from the area within the time available after flood warning.
- 4. Other similar uses and activities provided they cause no increase in flood heights and/or velocities. All uses, activities and structural developments shall be undertaken in strict compliance with the floodproofing provisions contained in all applicable codes and ordinances.

Section 15. - Factors to be considered when granting variances.

Variances shall be issued only upon (i) a showing of good and sufficient cause, (ii) after the Board of Zoning Appeals has determined that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) after the Board of Zoning Appeals has determined that the granting of such variance will not result in (a) unacceptable or prohibited increases in flood heights, (b) additional threats to public safety, (c) extraordinary public expense; and will not (d) create nuisances, (e) cause fraud or victimization of the public, or (f) conflict with local laws or ordinances.

While the granting of variances generally is limited to a lot size less than one-half acre, deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases. Variances may be issued by the Board of Zoning Appeals for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the provisions of this section.

In passing upon applications for variances, the board of zoning appeals shall satisfy all relevant factors and procedures specified in other sections of the zoning ordinance and consider the following additional factors:

- 1. The danger to life and property due to increased flood heights or velocities caused by encroachments. No variance shall be granted for any proposed use, development, or activity within any floodway area that will cause any increase in flood levels during the 100 year one percent annual chance flood.
- 2. The danger that materials may be swept onto other lands or downstream to the injury of others.
- 3. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.
- 4. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.
- 5. The importance of the services provided by the proposed facility to the community.
- 6. The requirements of the facility for a waterfront location.
- 7. The availability of alternative locations not subject to flooding for the proposed use.
- 8. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

- 9. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.
- 10. The safety of access by ordinary emergency vehicles to the property in time of flood.
- 11. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.
- 12. The historic nature of a structure. Variances for repair or rehabilitation of historic structures may be granted upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- 123. Such other factors which are relevant to the purposes of this ordinance.

The board of zoning appeals may refer any application and accompanying documentation pertaining to any request for a <u>use permit-variance</u> to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for flood protection and other related matters.

Variances shall be issued only after the board of zoning appeals has determined that the granting of such will not result in (a) unacceptable or prohibited increases in flood heights, (b) additional threats to public safety, (c) extraordinary public expense, and will not (d) create nuisances, (e) cause fraud or victimization of the public, or (f) conflict with local laws or ordinances.

The board of zoning appeals shall notify the applicant for a variance, in writing, that the issuance of a variance to construct a structure below the 100-year one percent annual chance flood elevation (a) increases the risks to life and property and (b) will result in increased premium rates for flood insurance. A record shall be maintained of the above notification as well as all variance actions, including justification for the issuance of the variances. Any variances which are issued shall be noted in the annual or biennial report submitted to the Federal Emergency Management Agency Insurance Administrator.

Section 16. - Design criteria for utilities and facilities.

- 1. Sanitary sewer facilities. All new or replacement sanitary sewer facilities and private package sewage treatment plants (including all pumping stations and collector systems) shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into the floodwaters. In addition, they should be located and constructed to minimize or eliminate flood damage and impairment.
- 2. Water facilities. All new or replacement water facilities shall be designed to minimize or eliminate infiltration of floodwaters into the system and be located and constructed to minimize or eliminate flood damages.
- 3. *Drainage facilities.* All storm drainage facilities shall be designed to convey the flow of surface waters without damage to persons or property. The systems shall ensure drainage away from buildings and on-site waste disposal sites. The town may require a primarily underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods. Drainage plans shall be consistent with local

- and regional drainage plans. The facilities shall be designed to minimize (or eliminate) the discharge of excess runoff onto adjacent properties.
- 4. *Utilities.* All utilities, such as gas lines, electrical and telephone systems being placed in flood_prone areas should be located, elevated (where possible), and constructed to minimize the change of impairment during a flooding occurrence.
- 5. Streets and sidewalks. Streets and sidewalks should be designed to minimize their potential for increasing and aggravating the levels of flood flow. Draining openings shall be required to sufficiently discharge flood flows without unduly increasing flood heights.

Section 17. - Existing structures in the floodplain overlay districts.

A structure or use of a structure or premises which lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions, may be continued subject to the following conditions:

- 1. Existing structures in the floodway shall not be expanded or enlarged unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed expansion would not result in any increase in the base flood elevation.
- 2. Any modification, alteration, repair, reconstruction, or improvement of any kind to a structure and/or use located in any floodplain district to an extendextent or amount of less than 50 percent of its market value, shall conform to the Virginia Uniform Statewide Building Code and the applicable provisions of this ordinancebe elevated and/or floodproofed to the greatest extent possible.
- 23. The modification, alteration, repair, reconstruction, or improvement of any kind to a structure and/or use, regardless of its location in a floodplain district, to an extent or amount of 50 percent or more of its market value shall be undertaken only in full compliance with the provisions of the Virginia Uniform Statewide Building Code and other applicable provisions of law.
- <u>34</u>. Uses or adjuncts thereof which are, or become, nuisances shall not be permitted to continue.

Section 18. - Administration

18.1 Designation of the Floodplain Administrator

The Zoning Administrator is hereby appointed to administer and implement these regulations and is referred to herein as the Floodplain Administrator. The Floodplain Administrator may:

- 1. Do the work themselves. In the absence of a designated Floodplain Administrator, the duties are conducted by the Town of Purcellville chief executive officer.
- 2. Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees.
- 3. Enter into a written agreement or written contract with another community or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity shall not relieve the community of its responsibilities pursuant to the participation requirements of the National Flood

<u>Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. Section</u> 59.22.

18.2 Duties and Responsibilities of the Floodplain Administrator

The duties and responsibilities of the Floodplain Administrator shall include but are not limited to:

- 1. Review applications for permits to determine whether proposed activities will be located in the Special Flood Hazard Area (SFHA).
- 2. Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.
- 3. Review applications to determine whether proposed activities will be reasonably safe from flooding and require new construction and substantial improvements to meet the requirements of these regulations.
- 4. Review applications to determine whether all necessary permits have been obtained from the Federal, State or local agencies from which prior or concurrent approval is required; in particular, permits from state agencies for any construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction (including bridges, culverts, structures), any alteration of a watercourse, or any change of the course, current, or cross section of a stream or body of water, including any change to the one percent annual chance floodplain of free-flowing non-tidal waters of the State.
- 5. Verify that applicants proposing an alteration of a watercourse have notified adjacent communities, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), and other appropriate agencies (VADEQ, USACE) and have submitted copies of such notifications to FEMA.
- 6. Advise applicants for new construction or substantial improvement of structures that are located within an area of the Coastal Barrier Resources System established by the Coastal Barrier Resources Act that Federal flood insurance is not available on such structures; areas subject to this limitation are shown on Flood Insurance Rate Maps as Coastal Barrier Resource System Areas (CBRS) or Otherwise Protected Areas (OPA).
- 7. Approve applications and issue permits to develop in flood hazard areas if the provisions of these regulations have been met, or disapprove applications if the provisions of these regulations have not been met.
- 8. Inspect or cause to be inspected, buildings, structures, and other development for which permits have been issued to determine compliance with these regulations or to determine if non-compliance has occurred or violations have been committed.
- 9. Review Elevation Certificates and require incomplete or deficient certificates to be corrected.
- 10. Submit to FEMA, or require applicants to submit to FEMA, data and information necessary to maintain FIRMs, including hydrologic and hydraulic engineering analyses prepared by or for the Town of Purcellville, within six months after such data and information becomes available if the analyses indicate changes in base flood elevations.
- 11. Maintain and permanently keep records that are necessary for the administration of these regulations, including:

- a. Flood Insurance Studies, Flood Insurance Rate Maps (including historic studies and maps and current effective studies and maps) and Letters of Map Change; and
- b. Documentation supporting issuance and denial of permits, Elevation Certificates, documentation of the elevation (in relation to the datum on the FIRM) to which structures have been flood-proofed, other required design certifications, variances, and records of enforcement actions taken to correct violations of these regulations.
- 12. Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders, and require permit holders to take corrective action.
- 13. Advise the Board of Zoning Appeals regarding the intent of these regulations and, for each application for a variance, prepare a staff report and recommendation.
- 14. Administer the requirements related to proposed work on existing buildings:
 - a. Make determinations as to whether buildings and structures that are located in flood hazard areas and that are damaged by any cause have been substantially damaged.
 - b. Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct, and prohibit the non-compliant repair of substantially damaged buildings except for temporary emergency protective measures necessary to secure a property or stabilize a building or structure to prevent additional damage.
- 15. Undertake, as determined appropriate by the Floodplain Administrator due to the circumstances, other actions which may include but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other Federal, State, and local agencies to assist with substantial damage determinations; providing owners of damaged structures information related to the proper repair of damaged structures in special flood hazard areas; and assisting property owners with documentation necessary to file claims for Increased Cost of Compliance coverage under NFIP flood insurance policies.
- 16. Notify the Federal Emergency Management Agency when the corporate boundaries of the Town of Purcellville have been modified and:
 - a. Provide a map that clearly delineates the new corporate boundaries or the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation; and
 - b. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.
- 17. Upon the request of FEMA, complete and submit a report concerning participation in the NFIP which may request information regarding the number of buildings in the SFHA, number of permits issued for development in the SFHA, and number of variances issued for development in the SFHA.

18. It is the duty of the Community Floodplain Administrator to take into account flood, mudslide and flood-related erosion hazards, to the extent that they are known, in all official actions relating to land management and use throughout the entire jurisdictional area of the Community, whether or not those hazards have been specifically delineated geographically (e.g. via mapping or surveying).

18.3 Use and Interpretation of FIRMs

The Floodplain Administrator shall make interpretations, where needed, as to the exact location of special flood hazard areas, floodplain boundaries, and floodway boundaries. The following shall apply to the use and interpretation of FIRMs and data:

- 1. Where field surveyed topography indicates that adjacent ground elevations:
 - a. Are below the base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as special flood hazard area and subject to the requirements of these regulations;
 - b. Are above the base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the SFHA.
- 2. In FEMA-identified special flood hazard areas where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a Federal, State, or other source shall be reviewed and reasonably used.
- 3. Base flood elevations and designated floodway boundaries on FIRMs and in FISs shall take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.
- 4. Other sources of data shall be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on FIRMs and in FISs.
- 5. If a Preliminary Flood Insurance Rate Map and/or a Preliminary Flood Insurance Study has been provided by FEMA:
 - a. Upon the issuance of a Letter of Final Determination by FEMA, the preliminary flood hazard data shall be used and shall replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.
 - b. Prior to the issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data shall be deemed the best available data pursuant to Section 8 of this Article and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.
 - c. Prior to issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.

18.4 Jurisdictional Boundary Changes

The County floodplain ordinance in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements for participation in the National Flood Insurance Program. Municipalities with existing floodplain ordinances shall pass a resolution acknowledging and accepting responsibility for enforcing floodplain ordinance standards prior to annexation of any area containing identified flood hazards. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.

In accordance with the Code of Federal Regulations, Title 44 Subpart (B) Section 59.22 (a) (9) (v) all NFIP participating communities must notify the Federal Emergency Management Agency and optionally the Virginia Department of Conservation and Recreation - Department of Dam Safety and Floodplain Management in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area.

In order that all Flood Insurance Rate Maps accurately represent the community's boundaries, a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority must be included with the notification.

18.5 Letters of Map Revision

When development in the floodplain will cause or causes a change in the base flood elevation, the applicant, including state agencies, must notify FEMA by applying for a Conditional Letter of Map Revision and then a Letter of Map Revision.

Example cases:

- 1. Any development that causes a rise in the base flood elevations within the floodway.
- 2. Any development occurring in Zone AE without a designated floodway, which will cause a rise of more than one foot in the base flood elevation.
- 3. Alteration or relocation of a stream (including but not limited to installing culverts and bridges).

18.6 Submitting Technical Data

Base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Emergency Management Agency of the changes by submitting technical or scientific data. The community may submit data via a LOMR. Such a submission is necessary so that upon confirmation of those physical

changes affecting flooding conditions, risk premium rates and flood plain management requirements will be based upon current data.

Section 19. - Standards for Subdivision Proposals

- 1. All subdivision proposals shall be consistent with the need to minimize flood damage;
- 2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- 3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and
- 4. Base flood elevation data shall be obtained from other sources or developed using detailed methodologies, hydraulic and hydrologic analysis, comparable to those contained in a Flood Insurance Study for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser.

ARTICLE 15. - DEFINITIONS

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Section 2. - Definitions.

2.1 Terms Defined

For the purpose of this ordinance, certain terms and words are hereby defined: <u>See Subsection</u> <u>2.2: Further Definitions for alternative locations within the Zoning Ordinance where terms are defined.</u>

Accessory automated teller machine (ATM). See Automated teller machine (ATM), accessory.

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Detached single-family dwelling. See Dwelling, single-family detached.

Development. Any man_made change to improved or unimproved real estate including, but not limited to, buildings or other structures, the placement of mobile_manufactured homes, streets, and other paving, utilities, filling, grading, excavation, mining, dredging, or drilling operations, or storage of equipment of materials.

Diameter at breast height (dbh). The diameter of a tree measured as the circumference of the tree trunk at 4.5 feet above the ground. In the case of multiple trunks, the collective circumstances of all trunks at 4.5 feet above grade will constitute dbh.

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Fitness center. A private fitness establishment which may offer for use aerobic training and/or strength training equipment, saunas, locker rooms and shower facilities and instruction in general health and physical fitness. Such use may provide massages, provided not more than five percent of the gross floor area is used for massages.

Floodplain. Any land area susceptible to being inundated by water from any source. (a) A relatively flat or low land area adjoining a river, stream, or watercourse which is subject to partial or complete inundation; (b) an area subject to the unusual and rapid accumulation of surface waters from any source. (fFor further definitions pertaining to floodplains, see Article 12: Floodplain Overlay District).

Floor area.

- a. Commercial, business, and industrial buildings, or buildings containing mixed uses: The sum of the gross horizontal areas of the several floors of a building measured from the exterior faces of the exterior walls or from the centerline of walls separating two buildings but not including: (1) attic space providing headroom of less than seven feet; (2) basement space not used for retailing; (3) uncovered steps or fire escapes; (4) accessory water towers or cooling towers; (5) accessory off-street parking spaces; and (6) accessory off-street loading spaces.
- b. Residential buildings: The sum of the gross horizontal areas of the several floors of a dwelling, exclusive of garages, basements, and open porches, measured from the exterior faces of the exterior walls.

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Yard/garage sale. Any sale entitled "garage sale," "yard sale," "barn sale," "lawn sale," or any similar casual, temporary sale of tangible personal property on any portion of a residential lot, as allowed by the use regulations of a zoning district, which is advertised by any means whereby the public at large can be made aware of such sale. Such sales are limited to a period of no more than three consecutive days.

2.2 Further Definitions

The following locations within this ordinance contain additional term definitions:

- 1. Additional definitions pertaining to parking lot landscaping are found in *Article 6, Section*1, Subsection 1.7: Parking Lot Landscape and Screening Requirements.
- 2. Additional definitions pertaining to signs are found in *Article 6, Section 3: General Sign Regulations.*
- 3. Additional definitions pertaining to lighting are found in *Article 6, Section 9: Lighting Requirements*.
- 4. Additional definitions pertaining to landscape buffering are found in *Article 7, Section 4:*<u>Buffering Requirements.</u>
- 5. Additional definitions pertaining to floodplains are found in *Article 12: Floodplain Overlay District*.
- 6. Additional definitions pertaining to steep slopes are found in *Article 13: Steep Slope Standards*.
- 7. Additional definitions pertaining to the Historic Corridor Overlay District are found in *Article 14A: Historic Corridor Overlay District—HC*.

